

EMSL Analytical, Inc. Asbestos Data Package

EMSL Order ID's 041226130 Project 4500000719-EE-002233-0809-01TTO Data Package 1

Prepared By: EMSL Special Projects Group

Date: November 12, 2012



TABLE OF CONTENTS

- 1. Case Narrative
- 2. Tabulated Sample Results
- 3. Worksheets/Benchsheets
- 4. QC Data Reports/Logs
- 5. Client and EMSL Internal Chains of Custody
- 6. Equipment Performance Checks
- 7. NVLAP/AIHA Certifications
- 8. Customer Correspondence



1. Case Narrative



EMSL ANALYTICAL, INC. 200 RT. 130 NORTH CINNAMINSON, NJ 08077

PHONE: (800) 220-3675 FAX: (856) 786-0235

November 12, 2012

Mark Woodke
Ecology & Environment, Inc.
720 3rd Ave, Suite 1700
Seattle, WA 98104
(206) 624-9537
MWoodke@ene.com

Re: Narrative, Project 4500000719-EE-002233-0809-01TTO; Bulk samples for PLM CARB 435 Level & analysis; EMSL Order ID 041226130.

Dear Mark:

On October 4, 2012, EMSL Analytical, Inc. in Cinnaminson, NJ received 9 Bulk samples via overnight carrier from Ecology & Environment, Inc. for asbestos content analysis via PLM CARB 435 Level A. These samples are associated with Project 4500000719-EE-002233-0809-01TTO. Samples were received under Chain of Custody (COC) in good condition, and logged in following normal lab procedures.

PLM CARB 435 Level A Analysis

All samples were dried prior to being placed in a freezer mill. Samples were not sieved, or processed in a muffle furnace, and were not treated with hydrochloric acid. The milled samples were then analyzed via polarized light microscopy (PLM) using the CARB 435 Level A SOP and the procedures from the EPA 600/R-93/116 method.

Results

All data was reported on a % asbestos basis. As per the CARB 435 Level A method SOP, any sample having asbestos content (visual estimation) ranging from <1% to 10% was subject to a 400 point count. The limit of quantification for this method is <0.25%.

QC Performed

QC was performed in compliance with EMSL's Quality Assurance Manual. For this sample set, 1 intraanalyst sample was analyzed.





EMSL ANALYTICAL, INC. 200 RT. 130 NORTH CINNAMINSON, NJ 08077

PHONE: (800) 220-3675 FAX: (856) 786-0235

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. In addition, I certify, that to the best of my knowledge and belief, the data as reported are true and accurate. Release of the data contained in this data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Stephen Siegel, CIH

Asbestos/Silica Laboratory Manager,

1/12-12

EMSL Cinnaminson, NJ

Robyn Denton

Laboratory Manager, EMSL Cinnaminson, NJ





2. Tabulated Sample Results



EMSL Analytical, Inc.

200 Route 130 North, Cinnaminson, NJ 08077 Phone/Fax: (800) 220-3675 / (856) 786-5974

http://www.emsl.com

cinnasblab@EMSL.com

EMSL Order:

041226130

CustomerID:

ECOL44

CustomerPO: ProjectID:

Attn: Mark Woodke

Ecology & Environment, Inc.

720 3rd Ave **Suite 1700**

Seattle, WA 98104

Phone:

(206) 624-9537

Fax:

(206) 621-9832

Received: Analysis Date: 10/04/12 2:20 PM

10/17/2012

Collected:

9/26/2012

Project: Burlington Hill; 10ZZ; EE-002233-0809-01TTO

Test Report: PLM Analysis of Bulk Samples for Asbestos via EPA 600/R-93/116 Method with CARB 435 Prep (Milling) Level A for 0.25% Target Analytical Sensitivity

				Non	-Asbestos	<u>Asbestos</u>		
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Type		
12090102 041226130-0001	LOCATION 1- WEST	Tan Non-Fibrous Homogeneous			99.50% Non-fibrous (other)	0.50% Actinolite		
12090104	LOCATION 1- MIDDLE	Tan Non-Fibrous Homogeneous			99.25% Non-fibrous (other)	0.75% Actinolite		
12090105	LOCATION 1- EAST	Gray Non-Fibrous Homogeneous			99.50% Non-fibrous (other)	0.50% Actinolite		
12090107	LOCATION 2- ALONG DRIVE-WAY	Brown Non-Fibrous Homogeneous			100.00% Non-fibrous (other)	None Detected		
12090109 041226130-0005	LOCATION 2- WEST OF GARAGE	Brown Non-Fibrous Homogeneous			100.00% Non-fibrous (other)	None Detected		
12090111 041226130-0006	LOCATION 3- NORTH END QUARRY	Gray Non-Fibrous Homogeneous	r re roman	SI W. W. W. A. 68	100.00% Non-fibrous (other)	None Detected		
12090112 041226130-0007	LOCATION 3- SOUTH END QUARRY	Gray Non-Fibrous Homogeneous			100.00% Non-fibrous (other)	None Detected		

Analyst(s)

Garret Vliet (9)

Stephen Siegel, CIH, Laboratory Manager or other approved signatory

EMSL maintains liability limited to the cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. The test results contained within this report meet the requirements of NELAC unless otherwise specified. Samples received in good condition unless otherwise noted.

Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ

Initial report from 10/17/2012 10:00:14



EMSL Analytical, Inc.

200 Route 130 North, Cinnaminson, NJ 08077 (800) 220-3675 / (856) 786-5974 Phone/Fax:

http://www.emsl.com cinnasblab@EMSL.com EMSL Order:

041226130

CustomerID:

ECOL44

CustomerPO: ProjectID:

Mark Woodke

Ecology & Environment, Inc.

720 3rd Ave **Suite 1700**

Seattle, WA 98104

Phone:

(206) 624-9537

Fax:

(206) 621-9832

Received: Analysis Date: 10/04/12 2:20 PM

Collected:

10/17/2012 9/26/2012

Project: Burlington Hill; 10ZZ; EE-002233-0809-01TTO

Test Report: PLM Analysis of Bulk Samples for Asbestos via EPA 600/R-93/116 Method with CARB 435 Prep (Milling) Level A for 0.25% Target Analytical Sensitivity

				<u>Nor</u>	-Asbestos	<u>Asbestos</u>		
Sample	Description	Appearance	%	Fibrous	% Non-Fibrous	% Type		
12090114	LOCATION 4- NORTH END	Brown Non-Fibrous Homogeneous			100.00% Non-fibrous (other)	None Detected		
12090115 041226130-0009	LOCATION 4- SOUTH END	Tan Non-Fibrous Homogeneous			100.00% Non-fibrous (other)	None Detected		

Analyst(s)

Garret Vliet (9)

Stephen Siegel, CIH, Laboratory Manager or other approved signatory

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Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ

Initial report from 10/17/2012 10:00:14

ASB_TYPE_1 ASB_AMT_1 ASB_TYPE_2 ASB_AMT_2 ASB_TYPE_3									
ASB_AM									
ASB_TYPE_2									
ASB_AMT_1	0.50	0.75	0.50						
ASB_TYPE_1	Actinolite	Actinolite	Actinolite						
TEST	PLM CARB 435 Level A	341226130-0002 PLM CARB 435 Level A	341226130-0003 PLM CARB 435 Level A	341226130-0004 PLM CARB 435 Level A	341226130-0005 PLM CARB 435 Level A	341226130-0006 PLM CARB 435 Level A	041226130-0007 PLM CARB 435 Level A	341226130-0008 PLM CARB 435 Level A	041226130-0009 PLM CARB 435 Level A
LABNUM	041226130-0001	041226130-0002	041226130-0003	041226130-0004	041226130-0005	041226130-0006	041226130-0007	041226130-0008	041226130-0009
ORDER CUSTSAMPLE LABNUM	12090102	12090104	12090105	12090107	12090109	12090111	12090112	12090114	12090115
ORDER	041226130 12090102	041226130 12090104	041226130 12090105	041226130 12090107	041226130 12090109	041226130 12090111	041226130 12090112	041226130 12090114	041226130 12090115

NON_ASB_FIBROUS_AMT NON_ASB_NONFIBROUS_AMT 0 99.5 0 0 100 0 0 100 0 0 100 0 0 100 0 0 100
NON_ASB_FIBROUS_AMT 0 0 0 0 0 0 0 0 0
Homogeniety Homogeneous Homogeneous Homogeneous Homogeneous Homogeneous Homogeneous Homogeneous Homogeneous
Color Tan Tan Gray Brown Brown Gray Gray
Treatment Color Crushed Tan Crushed Tan Crushed Brown Crushed Brown Crushed Gray Crushed Gray Crushed Gray Crushed Gray Crushed Tan
ASB_AMT_3



3. Worksheets/Benchsheets

PLM Analysis of Bulk Samples for Asbestos via EPA 600/R-93/116 Method with CARB 435 Prep (Milling) Level A for 0.25% Target Analytical Sensitivity

Client: Ecology + Environment

Logged: 10/4/12

TAT: 2 Week

Address: 720 31d Ave

Suite 1700 Seattle, WA 98104

. 98104 1072 141112 DM

Date/Time Due: 10/18/2012 2:20:00 PM

Fax:

Project: BURLINGTON HILL/ 1022-

Special	Instruc	tions

Order Number 041226130

					C	OMPONE	NT TY	PES				MICRO	SCOPIC		
Macroso	opic	Treatm	nent	Asbesto	s	Fibro	us		on-Fibr	ous			roperties		
COLOR (C) 1 Brown 4 White 2 Gray 5 Red 3 Tan 6 Various	7 Black 8 Silver 9 Blue 10 Yellow	1 Teased 2 Crushe 3 Dissol 4 Ashed 5 Heated 6 Melted	ed 2 A lve 3 A 4 T d 5 A	hrysotile mosite nthophyllite remolite ctinolite rocidolite		7 Cellulo 8 Glass 9 Min. Wo 10 Synthet 11 Other 12 Wollast 13 Hair	ool	14 Quart 15 Mica 16 Gypsu 17 Cal. 18 Matr: 19 Perl: 20 Other	ım Carbonat ix ite	ie	3. Uniform Diameter 4. Ribbon-Like 5. Tapered Ends Pleochroism (P) 1. Yes 2. No. 2. 2	ology (M) 6. Scaled 7. Pitted 8. Medulla 9. Exotic Shaj 10. Other 3irefringenece (B) ow: 0.010 6d 0.010-0.050 ligh >0.050	1. + 2 3. Variable	Elongation (S) Extinction (E) 1. Parallel 2. Symmetrical 3. Oblique	
		K\$350000.56	Stereo sbestos	Asbestos	% of		ther	Non-F	ibrous	Non-Asb Char.	4.6	lone 0.00 or Isotro	pic 4 Blue 5 Green 6 Colorless	4. Undulose	
Sample		reat E	Est. %	Type	Asbestos	Type	%	Туре	%	Ex. E4	4 (100	Optical I	Properties		
Sample	(C) 3	Teat		5	0.50			20	99.5		1.62	3 ⊥ R.I.	1.6	37-11 R.I.	Ì
-01	(T) 2	1/2	_		0.0				: 7.5		2	М		S	G.V.
	(H)										2P	3.4 2.83	(FC) 6	3 E	
_	(02/3 /	,		5	0.75			20	99,25		1.625		1.64	Ø ∥R.I. S	GU
-02	(H) (H)	12									2 P		(FC) 6	3 E	u ,
_	(C) 1/2	/	1	5	0.50			20	99,5		1.62	5 ^{-L R.I.}	1.6		
-03	(T) 1	12	/			_					2º	_ M ≥_B	(FC)	3 E	GS
	(C)	,		40				20	100	NF		⊥ R.I.	(FC) 6	<u>ノ</u> R.I.	
-04	(T) Z /	1/2	_							,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		M		S	GV
`	(H) (014		<u> </u>			100	NP	P	⊥ R.I.	(FC)	E R.I.	
-05	(C) 1 (T) 2	1,		NO				20	100	77		M	5	S	0.V.
	(H) (1/2									P	В	(FC)	Е	
-06	(C) 2 (T) 2	11		WO				20	100	NF	ļ	⊥ R.I.		R.I.	av
-06	(H) 9	1/2	_								P	6	(FC)	E	0
	(C) 2	//		ND		-		20	100	NF		⊥ R.I.		R.I.	
-07	(T) 2 /	12	_					-			P	M ⁻		S	a
	(C) 1		*	40		+		20	100	NF		⊥ R.I.		 R.I.	١,
-08	(T) 2	1/2	_	1 7		1		1	100	[[]		\preceq		S	0
	(H) (10									P	(B)	(FC)	Е	
0	(C) 2 3	(/		ND				20	100	NF		⊥ R.I. M		R.I. S	GV.
-09	(T) 2	1/2				-		-	-		P		(FC)	E	0347
	(C) 2/3	,		ND	_	-		20	100	NF		⊥ R.I.		R.I.	60
-09 QC	(T) 2	1/2	_								P	M B	(FC)	S E	
QC	(H)	+		L 1		ja.	ļ	<u> </u>		<u> </u>			(FC)	Е	J
	1			1. 1											

Room Temp (C): 22.3°C

PLM7.9.0



POINT COUNT WORKSHEET

Burlington Hill Billing #:

Sample:

Results:

Sample:	-6)\ C	ARB	A		
PREP#	Asbestos	Cellulose	Glass	Other Fib	Non Fib	Empty
. 1	0		¢.		50	
2	0		-		50	
3	ı				49	
4	0				50	
5	0				50	
6	l				49	
7	. 0				50	
8	0				50	
9						
10						
Total	2				398	

Results:	0.50	%	Action	<u> olite</u>

Sample: -02 CARO A									
PREP#	Asbestos	Cellulose	Glass	Other Fib	Non Fib	Empty			
1					49				
2	0				8 8				
3	0				50				
4	Ø				50				
5	1		2 7///		49				
6					49				
7	0				50	0			
8	0				SD.				
9									
10	2012 2022								
Total	3				397	9			

Results:	0.75	90	Activolite

Sample: -03 CARBA								
PREP#	Asbestos	Cellulose	Glass	Other Fib	Non Fib	Empty		
1	0				50			
2	0				50			
. 3	0				50			
4	0				50			
5					49			
6	0	,			50			
7	1	e e			49			
. 8	0				50			
9								
10				*				
Total	2				398			

PREP#	Asbestos	Cellulose	Glass	Other Fib	Non Fib	Empty
1					_	
2						
3						
4		\geq			9	
5						1
6						
7				·		
8	/					/
9						
10	·					
Total						

0.50% Activolite Results:

CALCULATIONS: P= (AP * 100)/TP

Analyst P = Percentage of Asbestos TP = Total number of non-empty Points

AP = number of Asbestos Points

NOTE: IF AP = 0 after completion of analysis and no asbestos was observed, Report "NI

NOTE: IF AP = 0 after completion of analysis but asbestos was observed, Report "< Analytical Sensitivi

Controlled Document

Confidential Business Information/Property of EMSL Analytical , Inc.

Gillies

Page 1 of 1

Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Client:

Logged:

TAT:

Address:

Fax: Project:

Room Temp (C): 22.2%

Date/Time Due:

R	F	F	F	R	F	N		F	SI	1		F	S
1	_			1 1	_	IV	\mathbf{U}	_	$\mathbf{O}_{\mathbf{I}}$	-1	\boldsymbol{L}		$oldsymbol{\circ}$

Special Instructions

Order Number

PLM7.9.0

2																
Miscroscopic				"		(COMPONE	ENT TY	PE\$				MICRO	SCOPIC		1
1 1 2 2 2 2 3 3 4 4 4 4 4 4 4 4	Macroso	copic	Treatm	nent	Asbesto					Von-Fibr	ous				3	1
Non-Abbasis Non-Abbasis	COLOR (C) 1 Brown 4 White 2 Gray 5 Red 3 Tan 6 Various	7 Black 8 Silver 5 9 Blue 10 Yellow	2 Crushe 3 Dissol 4 Ashed 5 Heated	ed 2 Ai lve 3 Ai 4 Ti d 5 Ai	mosite nthophyllite rèmolite ctinolite		8 Glass 9 Min. Wo 10 Synthet 11 Other 12 Wollast	ool tic	15 Mica 16 Gypsu 17 Cal. 18 Matri 19 Perli	ım Carbonat ix ite	te ·	I. Wavy 2. Straight 3. Uniform Diamete 4. Ribbon-Like 5. Tapered Ends Pleochroism (P) 1. Yes 2. No 3	6. Scaled 7. Pitted 8. Medulla 9. Exotic Sh 10. Other Birefringenece (B Low: 0.010 Med 0.010-0.050 High >0.050	1. + 2 - 3. Variable ape) Fiber Color (FC 1 White 2 Brown 3 Beise	C) Extinction (E)	
	HOMOGENEITY 1 Homogeneous 3 2 Heterogeneous 4	(H) OTHER Lavers (#)	As E	sbestos			Fit	orous		900000	Char.			5 Green 6 Colorless		Service Control
	10/6/2	(C) (T) / V	A			50		70			LA. L-Y	1) 2 RI. M	1.55	7- R.I. S	25,29
	10/8/6		2			B			20	92			الالالالا	6	R.I.	21,90
	10/00	(C)				18			20	82	-		7€ R.I.	(FC) &	7-IIR.L	222.
C C C C C C C C C C	10 (K)	(H)	7		1	30			20	70			~2L_R.I.		(Fis R.I.	
C	10/10/H	(H) /	#	·		65			20	35			∫ B	(FC)	/_E	2,9
C	19/11 (6)	(H) (H)	/										/ M	(FC) 6	S E	22,3
(T)		(T) ·							20			P	М	(FC)	s	
(C)		(T)							20			P	М	(FC)	S	
(C) (T)		(C) (T)		-					20				М		S	
(H)	*****	(C)		S-		at .			20		-	P	⊥ R.I.	(FC)	 R.I.	
		(H) (C)							20			P	⊥ R.I.	(FC)	R.L.	
Analysts & Wied Date: Date:		(H)				1	To the state of th					P		(FC)	S E	

EMSL Analytical, Inc.



4. QC Data Reports/Logs

Monthly PLM Bulk QC Summary

Laboratory: Cinnaminson Report #

3

Month/Year: Oct-12

				Orig	ginal	C	C	Varia	nce	
	Date	Reference #	Sample #	Analyst	Result	Analyst	Result	Original	QC	Conclusion
1	10/11/12	041226130-0005	12090109	GV	0	GB	0	0.00	0.00	Pass

Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

	10		\sim
Client:	Logged:	TAT:	QC
Address:	Date/Time Due:		
Fax: Project:	Special Instruct		Order Number 041226(30

	Г		C	OMPONE	NT TY	ES			1	MICRO	SCOPIC		
Macroscopic	Treatment	Asbesto		Fibro			Non-Fibr	ous		Optical	Properties		
COLOR (C) 1 Brown 4 White 7 Black 2 Gray 5 Red 8 Silver 3 Tan 6 Various 9 Blue 10 Yellow TEXTURE (T)	2 Crushed 2 3 Dissolve 3 4 Ashed 4 5 Heated 5	Chrysotile Amosite Anthophyllite Tremolite Actinolite Crocidolite	1 1 1 1 1	7 Cellulo 8 Glass 9 Min. Wo 0 Synthet 1 Other 2 Wollast 3 Hair	ol	14 Quart 15 Mica 16 Gypsu 17 Cal. 18 Matri 19 Perli 20 Other	ım Carbona ix ite	te	Straight Uniform Diamete Ribbon-Like Tenered Ends	rphology (M) 6. Scaled 7. Pitted 8. Medulla 9. Excels Sh 10. Other Birefringeness (B Low: 0.010 Med 0.010-0.050 High >0.050 None 0.00 or Lotre	1. + 2 3. Variable	Extinction (E) Extinction (E) Parallel Symmetrical Oblique Undulose	
1 Fibrous 2 Non-Fibrous 3 Other HOMOGENEITY (H) 1 Homogeneous 3 OTHER 2 Heterogeneous 4 Lavers (#) Sample Macrosc. Ti	Stereo Asbesto Est. %	s Asbestos Type	% of Asbestos	Fib	ther rous %	Non-F	ibrous %	Non-Asb Char. Ex. E4		Optical	S Green 6 Colorless Properties		
(C)	ı	ND	ì			20	100			⊥ R.I.	2	R.I.	GB
-5 (T) 1/(H) 1	1								P	-/	(FC)	E	
(C)					49	20				⊥ R.I.		R.I.	•
(T) (H)									P	В	(FC)	S	
(C)						20				⊥ R.I.] R.I.	
(T)		,								М		S	
(H)									P	B ⊥. R.I.	(FC)	E R.I.	
(C) (T)				-		20				Д К.а.		R.I.	
(H)					<u> </u>				P	В	(FC)	Е	
(C)					*******	20				⊥ R.I.		įį R.I.	
(T)									P	В	(FC)	S E	
(H) (C)					ļ	- 00		ļ	 	⊥ R.I.	(FC)	E	
(T)				 		20			 	М		s	
(H)									P	В	(FC)	Е	
(C)						20				⊥ R.i. M		R.i.	
(T) (H)				-		 	<u> </u>	-	P	В	(FC)	E	
(C)						20	 	<u> </u>		⊥ R.I.		[R.I.	
(T)										М		s	
(H)									Р	B ⊥ R.I.	(FC)	E	ļ
(C) (T)				+		20	ļ		+	Т Кл.	 	IJ R.I.	
(H)							 		P	В	(FC)	Е	
(C)						20				⊥ R.I.		R.I.	
(T)									P	M	(PO)	S	
(H)					<u> </u>				ľ	В	(FC)	Е	j

Analyst: G.B	Date:	10/11/12	Computer:	Marie Control of the	Date:	
Room Temp (C): 22,3°L		,	MSL Analytical,	Inc.		PLM7.9.0



5. Client and EMSL Internal Chains of Custody

041224130

Sample Custody & Analysis Required Form

SEPA EPA Region 10, 1200 Sixth Avenue, Seattle, WA 98101

Receiving Laboratory Information Condition of Samples upon Receipfat Lab:

The state of the stat Possible Toxic/Hazardous Data Confidential Laboratory: see the applicable OAPP SOW and/or Analytical Support Request for specific methods and defection, reporting, and/or quantitation limits Distribution: White - Laboratory Copy, Yeltow - Regional Sample Control Center (RSCC) Copy, Pink - Field or Office Copy Oil & Grea General Chemistry (see reue Airbill Number (If Known prior to sea TSS Mercury Metals (see reverse) PAH PCB Organics (see reverse) Enforce/Custody
#Co enter the number of containers for each preservative
type followed by the appropriate preservation code P @: © Enter the letter or range of letters on each container for each group of containers with the same preservative type. Each container for each unique sample number must have a unique letter on it. Location 3'- Soluthand War 2-west of Gazax 4-SouthEn A - HCI G - Na_S_0+EDTA
B - HNO
C - NaOH
D - H SO
D - H SO
F - Bottles pre-preserved at lab
F - Bottles pre-preserved at the lab
F - assorbic adds', then HCI
2 - Na_S_0, If required by plan. Time 2:20 pm Method of Shipment/ F2O Check all that apply - West TIme ᆵ ☐ Check here if the cooler is Iced 10 H 112 vachesa DOHOU. pcation ocation Date Date Received by Mobile Lab for Field Analysis (Signature) 206553 5,0 PCB wipe is to be 10cm x 10cm (100 of Vrim (PLM Level A 0.25%) Received for lab by (Signature) Matrix #C P #C P #C P #C P FPA Project Manageriphone number 102 Al Sb As Ba Be
B Cd Ca Cr Co
Cu Fe Pb Mg Mn
Mo Ni K Se Ag
Na Sn T1 V Zn
(see reverse for more to add/circle) 10.52.62. CARB 435 with Fild of We <u>ا ۵</u> 012021 lime न्यान Juliwohle 9-01 Date Date 9240 09260 2.000 / - (1.5 (40 - O) open Names (Print & Sign). Mark (R) after name of open recorder. 080 69 00 Project Name Burlington 211601060 Chain of Custody Record whise work EE-2200-33 2010 010 Contact Relinquished by (Signature) Shipped by (Signature) 209 160 0 O Q 0 CARB

EPA Manchester Laboratory, 7411 Beach Drive East, Port Orchard, WA 96366, 360-971-9700 Revision 1

INTERNAL CHAIN OF CUSTODY

Order ID: 041226130

10/4/2012 4:09:28 PM

Attn: MISC-SC ECOL44 11/4/12 DAM EPA Region 10- Julie Wroble Customer ID: ecology of Environment Customer PO: Received: 10/04/12 2:20 PM Phone: Fax: EMSL Order: 041226130 **BURLINGTON HILL/ 1922** Project: EMSL Proj ID: 1077 11/4/12-Dun Cust COC ID REPORT TO INSTRUCTIONS **BILL TO INSTRUCTIONS** ☐ Exempt from prep charge Send Receipt Confirmation Emails Email Invoice Only- Do Project ID required not send hard copy. Exempt from off hour min charges ☐ Email Report Only-Do not send hard copy Cust. COC ID required Credit Card on File Exempt from layer/aliquot charges ■ No electronic signatures ✓ Miscellaneous account P.O. Required Billing Frequency Sales Rep and Comment: pfrasca With Report -- Print and send an invoice for each Order ID Use Billing Contact: Accounting Terms: COD Payment Directions: With Report Instructions Instructions **Internal Comment** PLM CARB 435 Level A 2 Week 9 Test: **Matrix** Bulk TAT: Qty: kdreber Logged: **Date:** 10/4/2012 ☐ Lab Opening Exempt For Test ✓ Acceptable Sample ☐ Prep Charge Exempt For Test Condition: ☐ Unacceptable ☐ Layer/Aliquot Charge Exempt For Test Comments Prepped: Analyzed: Data Entry Date Screened: Date Mailed: 4041 Date ! Special Test Instructions

Lab Sample #	Cust. Sample #	Location	Due Date
041226130-0001	12090102	LOCATION 1- WEST	10/18/2012 2:20:00 PM
041226130-0002	12090104	LOCATION 1- MIDDLE	10/18/2012 2:20:00 PM
041226130-0003	12090105	LOCATION 1- EAST	10/18/2012 2:20:00 PM
041226130-0004	12090107	LOCATION 2- ALONG DRIVE-WAY	10/18/2012 2:20:00 PM
041226130-0005	12090109	LOCATION 2- WEST OF GARAGE	10/18/2012 2:20:00 PM
041226130-0006	12090111	LOCATION 3- NORTH END QUARRY	10/18/2012 2:20:00 PM
041226130-0007	12090112	LOCATION 3- SOUTH END QUARRY	10/18/2012 2:20:00 PM
041226130-0008	12090114	LOCATION 4- NORTH END	10/18/2012 2:20:00 PM

INTERNAL CHAIN OF CUSTODY

Order ID: 041226130

10/4/2012 4:09:28 PM

Attn:

Ecology & Environment 11/4/12 DM

Customer ID: Customer PO: MISESC ECOLYY

10/04/12 2:20 PM

Illulio Don

Fax:

Phone:

Project: BURLINGTON HILL/ 1022

Received:

EMSL Order:

041226130

EMSL Proj ID:

Cust COC ID

041226130-0009

12090115

LOCATION 4- SOUTH END

10/18/2012 2:20:00 PM



6. Equipment Performance Checks

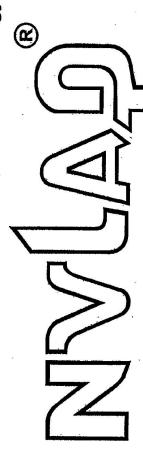
PLM Calibration & Contamination Record

Lab: 04 Cinnamicson Month/Year: October, 2012 LM Scope #: Monthly Daily Record Wavelength Ocular Analyzer/ Stage / Condenser Alignment Daily (Amosite DS) Polarizer Objective Focused / (NIST Contamination Anthophyllite) T Illuminatión Centered 90° Centered' G. Vict 460 600

Daily contamination check includes checks of the following: Tools, Fine Table Salt, R.I. Oils, Work Surfaces, and Slides.



7. NVLAP/AIHA Certifications



Certificate of Accreditation to ISO/IEC 17025:2005

NVLAP LAB CODE: 101048-0

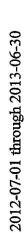
EMSL Analytical, Inc.

Cinnaminson, NJ

is accredited by the National Voluntary Laboratory Accreditation Program for specific services, isted on the Scope of Accreditation, for:

AIRBORNE ASBESTOS FIBER ANALYSIS

This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated January 2009). This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005.



Effective dates





For the National Institute of Standards and Technology



National Voluntary Laboratory Accreditation Program



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

EMSL Analytical, Inc.

200 Route 130 North Cinnaminson, NJ 08077 Mr. Stephen Siegel, CIH

Phone: 800-220-3675 Fax: 856-786-5973

E-Mail: ssiegel@emsl.com URL: http://www.emsl.com

AIRBORNE ASBESTOS FIBER ANALYSIS (TEM)

NVLAP LAB CODE 101048-0

NVLAP Code Designation / Description

18/A02 U.S. EPA's "Interim Transmission Electron Microscopy Analytical Methods-Mandatory and

Nonmandatory-and Mandatory Section to Determine Completion of Response Actions" as

found in 40 CFR, Part 763, Subpart E, Appendix A.

2012-07-01 through 2013-06-30

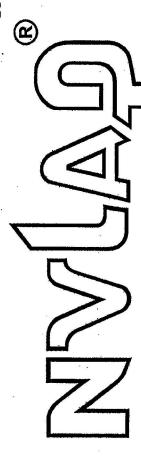
Effective dates

Man 2 Mill

For the National Institute of Standards and Technology

Page 1 of 1

NVLAP-01S (REV. 2005-05-19)



Certificate of Accreditation to ISO/IEC 17025:2005

NVLAP LAB CODE: 101048-0

EMSL Analytical, Inc.

Cinnaminson, NJ

is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:

BULK ASBESTOS FIBER ANALYSIS

This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated January 2009). This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005.

2012-07-01 through 2013-06-30

Effective dates



M- 2 mc

For the National Institute of Standards and Technology



National Voluntary Laboratory Accreditation Program



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

EMSL Analytical, Inc. 200 Route 130 North Cinnaminson, NJ 08077

Mr. Stephen Siegel, CIH

Phone: 800-220-3675 Fax: 856-786-5973

E-Mail: ssiegel@emsl.com URL: http://www.emsl.com

BULK ASBESTOS FIBER ANALYSIS (PLM)

NVLAP LAB CODE 101048-0

NVLAP Code Designation / Description

18/A01 EPA-600/M4-82-020: Interim Method for the Determination of Asbestos in Bulk Insulation

Samples

2012-07-01 through 2013-06-30

Effective dates

Man D. M. Q

For the National Institute of Standards and Technology

Page 1 of 1

NVLAP-01S (REV. 2005-05-19)



AIHA Laboratory Accreditation Programs, LLC

acknowledges that

EMSL Analytical, Inc.

200 Route 130 North, Cinnaminson, NJ 08077

Laboratory ID: 100194

along with all premises from which key activities are performed, as listed above, has fulfilled the requirements of the AIHA Laboratory Accreditation Programs (AIHA-LAP), LLC accreditation to the ISO/IEC 17025:2005 international standard, General Requirements for the Competence of Testing and Calibration Laboratories in the following:

LABORATORY ACCREDITATION PROGRAMS

INDUSTRIAL HYGIENE

ENVIRONMENTAL LEAD

ENVIRONMENTAL MICROBIOLOGY

Accreditation Expires: 07/01/2014
Accreditation Expires: 07/01/2014

Accreditation Expires: 07/01/2014
Accreditation Expires:

FOOD

Specific Field(s) of Testing (FoT)/Method(s) within each Accreditation Program for which the above named laboratory maintains accreditation is outlined on the attached Scope of Accreditation. Continued accreditation is contingent upon successful on-going compliance with ISO/IEC 17025:2005 and AIHA-LAP, LLC requirements. This certificate is not valid without the attached Scope of Accreditation. Please review the AIHA-Cheny G. Charten LAP, LLC website (www.aihaaccreditedlabs.org) for the most current Scope.

Cheryl O.

Cheryl O. Morton

Managing Director, AIHA Laboratory Accreditation Programs, LLC

Revision 12: 03/29/2012

Chairperson, Analytical Accreditation Board

S. D. Allen Iske, PhD, CIH, CSP

Date Issued: 07/31/2012



AIHA Laboratory Accreditation Programs, LLC SCOPE OF ACCREDITATION

EMSL Analytical, Inc.

200 Route 130 North, Cinnaminson, NJ 08077

Laboratory ID: **100194**Issue Date: 07/31/2012

The laboratory is approved for those specific field(s) of testing/methods listed in the table below. Clients are urged to verify the laboratory's current accreditation status for the particular field(s) of testing/Methods, since these can change due to proficiency status, suspension and/or revocation. A complete listing of currently accredited Industrial Hygiene laboratories is available on the AIHA-LAP, LLC website at: http://www.aihaaccreditedlabs.org

Industrial Hygiene Laboratory Accreditation Program (IHLAP)

Initial Accreditation Date: 02/01/1989

IHLAP Scope Category	Field of Testing (FoT)	Technology sub-type/ Detector	Published Reference Method/Title of In-house Method	Method Description or Analyte (for internal methods only)
			NIOSH 1003	
			NIOSH 1005	
			NIOSH 1400	
		GC/ FID	NIOSH 1500	
			NIOSH 1550	
	Gas Chromatography		NIOSH 1603	
	Gas Chromatography		NIOSH 2000	
			NIOSH 5502	
		GC/ECD	NIOSH 5503	
		GC/ECD	NIOSH 5510	
Chromatography			OSHA 1010	
Core		GC/NPD	NIOSH 2551	
	GC/MS		EPA TO-15	
	Gas Chromatography (Diffusive Samplers)		NIOSH 1501	
			NIOSH 6004	
	Tan Character and the		NIOSH 6011	
	Ion Chromatography (IC)		NIOSH 7903	
	(IC)		OSHA ID-214	
			OSHA ID-215	
	Liquid	HPLC/FL	NIOSH 5506	
	Chromatography	HPLC/UV	NIOSH 2016	

Effective: 09/28/2011 Scope_IHLAP_R6 Page 1 of 2



IHLAP Scope Category	Field of Testing (FoT)	Technology sub-type/ Detector	Published Reference Method/Title of In-house Method	Method Description or Analyte (for internal methods only)
		<u>.</u>	NIOSH 6009	
		CVAA	OSHA ID-145	SOP LM-015
	Atomic Absorption		OSHA ID-145	SOP LM-013
		FAA	NIOSH 7082	
		GFAA	NIOSH 7105	
Spectrometry Core	Inductively-Coupled	ICP/MS	NIOSH 7300 Modified	
	Plasma	ICP/AES	NIOSH 7300	
	X-ray Diffraction		NIOSH 7500	
	(XRD)		OSHA ID-142	
	UV/VIS (Colorimetric)		NIOSH 6010	
	Polarized Light Microscopy (PLM)		EPA 600/R-93/116	
Asbestos/Fiber	Phase Contrast Microscopy (PCM)		NIOSH 7400	
Microscopy Core	Transmission Electron		EPA AHERA - 40 CFR Part	
	Microscopy (TEM)		763	
	wherescopy (TEWI)		NIOSH 7402	
			NIOSH 0500	
	Gravimetric		NIOSH 0600	
Miscellaneous Core			NIOSH 5524	
	Thermo-optical Analysis (TOA)		NIOSH 5040	

The laboratory participates in the following AIHA-LAP, LLC-approved proficiency testing programs: AIHA-PAT Programs, LLC IHPAT Metals Pharmaceutical Round Robin AIHA-PAT Programs, LLC IHPAT Organic Solvents Compressed/Breathing Air Round Robin AIHA-PAT Programs, LLC IHPAT Silica National Voluntary Laboratory Accreditation Program AIHA-PAT Programs, LLC IHPAT Diffusive Sampler (3M) (NVLAP - determined at the time of site assessment) AIHA-PAT Programs, LLC IHPAT Diffusive Sampler (SKC) New York State Department of Health (NYS DOH - PCM and AIHA-PAT Programs, LLC IHPAT Diffusive Sampler (AT) AIHA-PAT Programs, LLC IHPAT Asbestos ERA Air and Emissions standards for indoor air quality AIHA-PAT Programs, LLC Bulk Asbestos (BAPAT) Institut für Arbeitsschutz der Deutschen Gesetzlichen AIHA-PAT Programs, LLC Beryllium (BePAT) Unfallversicherung (IFA, formerly BGIA) HSE Workplace Analytical Scheme for Proficiency (WASP) Institut de Recherche Robert-Sauvé en Santé et en Sécurité du (Formaldehyde) Travail (IRSST)

Effective: 09/28/2011 Scope_IHLAP_R6 Page 2 of 2

(Thermal Desorption Tubes)

HSE Workplace Analytical Scheme for Proficiency (WASP)



8. Customer Correspondence

McDaniel, Debrah

From: Sent: Woodke, Mark [MWoodke@ene.com] Friday, October 12, 2012 10:04 AM

To:

LaCerra, Charles

Cc:

McDaniel, Debrah

Subject:

RE: accounting and reporting - burlington hill project

Attachments:

image001.jpg; image002.jpg; image003.jpg; image004.jpg; image005.jpg

Yes, these should be billed to me if I didn't answer already. When will the results be available? Thanks.

From: LaCerra, Charles [mailto:CLaCerra@EMSL.com]

Sent: Tuesday, October 09, 2012 11:51 AM

To: Woodke, Mark **Cc:** McDaniel, Debrah

Subject: RE: accounting and reporting - burlington hill project

Your login client ID is ECOL44. Just checking to see if these are samples that are bill to and report to E&E. Will check on waiver forms. Charlie



Charles LaCerra | Special Projects and Sample Receiving Manager

EMSL Analytical, Inc. | 200 Route 130 North | Cinnaminson, NJ 08077

Phone: 856-303-2540 | Fax: 856-786-0235 | Toll Free: 800-220-3675 Lab Hours: Mon-Friday 7AM-10PM, Saturday 8AM-5PM, Sunday On-Call

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From: Woodke, Mark [mailto:MWoodke@ene.com]

Sent: Tuesday, October 09, 2012 2:38 PM

To: LaCerra, Charles

Subject: RE: accounting and reporting - burlington hill project

Our system is having issues today so I can't check some things. This project is a new project separate from all others; EPA collected the samples and we are paying for the analyses. If ECOL44 is older than a few weeks, don't put it on that project. I'll make sure the PO gets sent out but our system might not be back up until sometime tomorrow.

Also, I was told that we need some waiver forms and at least one BOA modification form sent to us before we can pay some older invoices; can you check with Robert and make sure these are being dealt with? Sorry I can't give you specifics since we have quite a few projects with you right now. Thanks.

From: LaCerra, Charles [mailto:CLaCerra@EMSL.com]

Sent: Tuesday, October 09, 2012 11:28 AM

To: Woodke, Mark

Subject: FW: accounting and reporting - burlington hill project

Mark: should samples associated with this email be logged in and billed to ECOL44?



Charles LaCerra | Special Projects and Sample Receiving Manager

EMSL Analytical, Inc. | 200 Route 130 North | Cinnaminson, NJ 08077

Phone: 856-303-2540 | Fax: 856-786-0235 | Toll Free: 800-220-3675 Lab Hours: Mon-Friday 7AM-10PM, Saturday 8AM-5PM, Sunday On-Call

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From: Nurthen, Michael

Sent: Tuesday, October 09, 2012 1:29 PM

To: Cahill, Ed; LaCerra, Charles

Subject: FW: accounting and reporting - burlington hill project

By the way, Julie Wroble said she had spoken with both of you here, so I am forwarding to make sure it is logged in correctly, etc.

Andy Smith Smith.Andy@epamail.epa.gov Mark Woodke MWoodke@ene.com Jed Januch Januch.Jed@epamail.epa.gov Jennifer Crawford Crawford.Jennifer@epamail.epa.gov



Michael Nurthen | Sales Account Representative

EMSL Analytical, Inc. | 200 Route 130 North | Cinnaminson, NJ 08077

Phone: 856-303-2564 | Fax: 856-786-5971 | Toll Free: 800-220-3675

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From: Julie Wroble [mailto:Wroble.Julie@epamail.epa.gov]

Sent: Tuesday, October 09, 2012 1:24 PM

To: Nurthen, Michael

Cc: Andy Smith; MWoodke@ene.com; Jed Januch; Jennifer Crawford

Subject: accounting and reporting - burlington hill project

Mike:

Andy (EPA) and Mark (E & E) have more information about the accounting details and reporting details required for this work. I'm also CC'ing Jed Januch and Jennifer Crawford of EPA who deal with our laboratory (MEL). Thank you.

Julie Wroble Region 10 Toxicologist 206/553-1079

Click here to report this email as spam.

McDaniel, Debrah

From:

Woodke, Mark [MWoodke@ene.com]

Sent:

Thursday, November 01, 2012 12:58 PM

To: Subject: McDaniel, Debrah RE: 041226130

Attachments:

image002.jpg; image003.jpg; image004.jpg; image005.jpg; image006.jpg

I'll forward them.

From: McDaniel, Debrah [mailto:dmcdaniel@EMSL.com]

Sent: Thursday, November 01, 2012 9:58 AM

To: Woodke, Mark Subject: 041226130

Mark,

I will need to make revisions to EMSL order 041226130-Burlington Hill Project. I believe you did not receive an EDD as well? Please let me know who is included in the distribution list for this project, or if you would like to forward them to these contacts.

Thank you,



Debrah McDaniel | Special Projects Assistant EMSL Analytical, Inc. | 200 Route 130 North | Cinnaminson, NJ 08077

Phone: 856-858-4800 Ext 2207 | Fax: 856-786-0235 | Toll Free: 800-220-3675 Lab Hours: Mon-Friday 7AM-10PM, Saturday 8AM-5PM, Sunday On-Call

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Click here to report this email as spam.

McDaniel, Debrah

From: Sent:

Woodke, Mark [MWoodke@ene.com] Friday, November 02, 2012 9:24 AM

To:

McDaniel, Debrah

Subject:

RE: 041226130

Attachments:

image002.jpg; image003.jpg; image004.jpg; image005.jpg; image006.jpg

Yes, please send a data package.

From: McDaniel, Debrah [mailto:dmcdaniel@EMSL.com]

Sent: Friday, November 02, 2012 6:09 AM

To: Woodke, Mark

Subject: RE: 041226130

Mark,

I sent over the invoice for this project yesterday so you may have it for end of the month billing. There is a data package charge on the invoice based on the project summary paperwork attached above. I just wanted to confirm that you will require a data package for the Burlington Hill project so I may get this sent out and also finalize the invoice. Please let me know as soon as you can.

Thank you,



Debrah McDaniel | Special Projects Assistant

EMSL Analytical, Inc. | 200 Route 130 North | Cinnaminson, NJ 08077 Phone: 856-858-4800 Ext 2207 | Fax: 856-786-0235 | Toll Free: 800-220-3675 Lab Hours: Mon-Friday 7AM-10PM, Saturday 8AM-5PM, Sunday On-Call

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From: Woodke, Mark [mailto:MWoodke@ene.com] Sent: Thursday, November 01, 2012 12:58 PM

To: McDaniel, Debrah **Subject:** RE: 041226130

I'll forward them.

From: McDaniel, Debrah [mailto:dmcdaniel@EMSL.com]

Sent: Thursday, November 01, 2012 9:58 AM

To: Woodke, Mark Subject: 041226130

Mark,

I will need to make revisions to EMSL order 041226130-Burlington Hill Project. I believe you did not receive an EDD as well? Please let me know who is included in the distribution list for this project, or if you would like to forward them to these contacts.

Thank you,



Debrah McDaniel | Special Projects Assistant
EMSL Analytical, Inc. | 200 Route 130 North | Cinnaminson, NJ 08077

Phone: 856-858-4800 Ext 2207 | Fax: 856-786-0235 | Toll Free: 800-220-3675 Lab Hours: Mon-Friday 7AM-10PM, Saturday 8AM-5PM, Sunday On-Call

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